Attorney Docket No.: 70439.00003

IN THE CLAIMS

Please, replace all previous listings of the claims with the following claims:

Claim 1-93. (Cancelled)

- 94. (New) A composition comprising a reaction mixture comprising a complex of a bacterial RlmA protein, or an rRNA binding fragment thereof, and an rRNA that binds said protein.
- 95. (New) The composition of claim 94, comprising an rRNA binding domain of said RlmA protein.
- 96. (New) The composition of claim 94, further comprising a compound being tested for inhibitory activity against a bacterial strain.
- 97. (New) The composition of claim 94, wherein the bacterial RlmA protein or the rRNA is detectably labeled.
- 98. (New) A method of identifying compounds having inhibitory activity against a bacterial strain, comprising:
- a) preparing a reaction system comprising a bacterial RlmA protein or a rRNA binding domain thereof, a rRNA that binds said protein or binding domain thereof, and a candidate compound; and
- b) detecting extent of binding between the bacterial RlmA protein and the rRNA, wherein reduced binding between the bacterial RlmA protein and the rRNA in the presence of the compound relative to a control is indicative of inhibitory activity of the compound against the bacterial strain.
- 99. (New) The method of claim 98, wherein the bacterial RlmA protein or rRNA binding domain thereof is immobilized on a solid support.
- 100. (New) The method of claim 98, wherein the candidate compound is added to the reaction system prior to or simultaneously with the bacterial RlmA protein and the rRNA.

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- 101. (New) The method of claim 98, wherein the candidate compound is added to the reaction system subsequent to addition of the bacterial RlmA protein and the rRNA.
- 102. (New) The method of claim 98, further comprising labeling the rRNA, bacterial RImA protein or rRNA binding domain thereof with the detectable label, prior to said detecting.
- 103. (New) The method of claim 102, wherein the detectable label comprises an antibody or fragment thereof that binds the bacterial RlmA protein or rRNA binding domain thereof.
- 104. (New) The method of claim 102, wherein the detectable label comprises an enzyme and the reaction system further comprises a substrate for the enzyme.
- 105. (New) The method of claim 102, wherein the detectable label comprises a radioisotope.
- 106. (New) The method of claim 102, wherein the detectable label comprises a fluorescent label.
- 107. (New) The method of claim 98, wherein said detecting is conducted via fluorescent resonance energy transfer.
- 108. (New) The method of claim 98, wherein said detecting is conducted via fluorescence polarization anisotropy measurements.
- 109. (New) The method of claim 98, wherein the bacterial RlmA protein or rRNA binding fragment thereof is present in the reaction system as a fusion protein with glutathione-Stransferase.
- 110. (New) The method of claim 98, wherein the method of identification comprises a high throughput screening assay.
- 111. (New) A method of identifying compounds having inhibitory activity against a bacterial strain, comprising:

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a) preparing a reaction system comprising a bacterial RlmA protein of a bacterial strain of a rRNA binding domain thereof, a rRNA that binds said protein or binding domain thereof, and a candidate compound;

b) detecting extend of binding between the bacterial RlmA protein and the rRNA, wherein reduced binding between the bacterial RlmA protein and the rRNA in the presence of the compound relative to a control is indicative of inhibitory activity of the compound against the bacterial strain; and

c) determining extent of a compound identified in b) as having inhibitory activity to inhibit growth of a bacterial strain *in vitro*.

112. (New) The method in claim 111, wherein the method of identifying compounds having inhibitory activity is selected from the group consisting of (a) NMR chemical shift perturbation, (b) gel filtration chromatography, or c) sedimentation equilibrium measurements using an analytical ultracentrifuge.

113. (New) The method of claim 111, further comprising d) determining extent of a compound identified in c) as inhibiting growth of a bacterial strain *in vitro*, to inhibit replication of a bacterial strain in a non-human animal.